

Application Number 10/688,311  
Amendment dated October 23, 2006  
Responsive to Office Action mailed April 21, 2006

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**REMARKS**

This Amendment is responsive to the Office Action dated April 21, 2006. Applicant has canceled claims 1-24. New claims 25-43 have been added. Claims 25-43 are pending.

**Claim Rejection Under 35 U.S.C. § 112**

In the Office Action, the Examiner rejected claims 22-24 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. By this Amendment, Applicant has canceled claims 22-24. Applicant therefore respectfully requests that the objection under 35 U.S.C. 112 be withdrawn.

**Claim Rejection Under 35 U.S.C. § 101**

In the Office Action, the Examiner rejected claims 22-24 because the claimed invention is directed to non-statutory subject matter. By this Amendment, Applicant has canceled claims 22-24. Applicant therefore respectfully requests that the rejection under 35 U.S.C. 101 be withdrawn.

**Claim Rejections Under 35 U.S.C. § 103**

In the Office Action, the Examiner rejected claims 1-2, 4-11, 15 and 19-24 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 6,016,497 to Suver (hereinafter "Suver") in view of U.S. Patent 6,029,178 to Martin et al. (hereinafter "Martin"). Claim 3 was rejected under 35 U.S.C. 103(a) as being unpatentable over Suver in view of Martin, and further in view of U.S. Patent Application 2004/0064543 to Ashutosh et al. (hereinafter "Ashutosh"). Claims 12-14 were rejected under 35 U.S.C. 103(a) as being unpatentable over Martin in view of Suver.

Applicant respectfully traverses the rejections to the extent such rejections may be considered applicable to new claims 25-43. The applied references fail to disclose or suggest the inventions defined by Applicant's claims, and provide no teaching that would have suggested the desirability of modification to arrive at the claimed invention.

Prior to addressing the distinctions between the new claims and cited references, the teachings of the present invention and the cited references are briefly discussed in turn.

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The present invention is directed toward transport of data from a source database, such as a database associated with a production system, to a target database, such as a database associated with a test and development system. Namely, the presently claimed invention allows for selective copying of only certain portions of the source database related to user selectable criteria over to a target database to create an ideal development, testing or training environment. The present invention reduces the total amount of data that must be transferred from the source to the target by identifying and transferring only that data that is relevant to the user selectable criteria.

As stated in Applicant's disclosure, prior art mechanisms that transfer data from production systems down to test and development systems require either (i) making a copy of the entire source database over to the target system, a process that requires bringing down the source system for a period of hours, days or even weeks, or (ii) sending a smaller subset of data through an "application program interface" that verifies the completeness of the data but greatly increases the processing time (see Applicant's specification at page 2, lines 1-19).

However, with Applicant's invention, only those tables related to user selectable criteria are transferred, drastically reducing the both the amount of data transferred from the source to the target and also the time required to complete the transfer. As such, the source system does not need to be taken down for hours, days or weeks at a time. Rather, no downtime of the source database is experienced. Users may continue to use the source database at any time because there is no longer any need to take it down to produce the desired development, test or training environment. In addition, code developers may quickly and efficiently selectively refresh the target database on demand to create complete and relevant test environments.

In contrast, Suver is concerned with database management tools which allow for faster and more efficient queries into a database. Specifically, Suver discloses methods of storing and accessing embedded information in object relational databases. The embedded data are stored directly in a complex column comprising embedded data sub-tables. Suver also discloses a query language for accessing the data that includes a series of extensions providing access paths to the embedded data (see Suver, Abstract).

Martin is likewise not concerned with selective copying of only certain portions of the source database related to user selectable criteria over to a target database. Rather, Martin is

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concerned with providing consistency of replicated data in a distributed enterprise computing system. The methods disclosed by Martin are used for change management between a source and a target database to ensure that changes made to the source database are consistently applied across multiple databases. Therefore, a previous edition of the data must already be present in the target database, as the editions of the target and the source are compared to determine whether the target needs to be updated (see Martin, Abstract).

Ashutosh is concerned with monitoring data paths of software applications and storage systems and creating maps of the software application and storage domains. To do this, the system collects configuration data from a software application and a storage system, wherein the configuration data represents configuration dependencies between the software application and a storage system. The purpose of Ashutosh is to characterize system performance, availability, recoverability, cost and security for the system, and to increasing data storage efficiency (see Ashutosh, Abstract and page 1, para [0007]).

With these general descriptions in mind, significant distinctions between new claims 25-43 and the cited references are provided below.

#### *New claims 25-43*

Applicant has added claims 25-43 to the pending application. No new matter has been added by the new claims.

The applied references fail to disclose or suggest the inventions defined by Applicant's new claims, and provide no teaching that would have suggested the desirability of modification to arrive at the claimed inventions.

With respect to new independent claims 25 and 37, for example, the applied references lack any teaching that would have suggested identifying configuration tables in a target database, excluding the identified configuration tables from tables listed in a data dictionary and generating therefrom a list of remaining tables, determining whether any of the remaining tables in the source database contain data, and placing the remaining tables that contain data on the source database on a list of populated tables. However, the Examiner refers to Ashutosh: [0006], lns. 18-21 as teaching that static data is configuration data (see the Office Action at page 10,

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discussion regarding claim 3). The Examiner also refers to Suver, col. 25, lns. 53-63 and FIG. 17 as teaching "generating an exclusion list by examining records in the database of tables" (see the Office Action at page 12, discussion regarding claim 16).

Applicant respectfully disagrees. Although Ashutosh mentions the phrase "configuration data" it does not teach or suggest identifying configuration tables in a target database, excluding the identified configuration tables from tables listed in a data dictionary and generating therefrom a list of remaining tables as recited in claims 25 and 37. In addition, Suver, col. 25, lns. 53-63, merely refers to finding and retrieving identified data from rows in a table, and does not teach or suggest excluding the identified configuration tables from tables listed in a data dictionary and generating therefrom a list of remaining tables as recited in claims 25 and 37. In addition, none of the cited references, either alone or in combination, teach or suggest determining whether any of the remaining tables in the source database contain data, and placing the remaining tables that contain data on the source database on a list of populated tables, as also recited in claims 25 and 37.

As a further example, with respect to new dependent claims 30 and 38, the applied references lack any teaching that would have suggested obtaining at least one key field for each of the populated tables in the source database and linking each populated table to at least one of a plurality of send programs based on the at least one key field. However, the Examiner refers to Suver col. 13, lns. 63-67; col. 14, lns. 1-6; col. 20, lns. 44-53 and Martin col. 19, lns. 38-43 as showing this type of "linking" (see the Office Action at page 5, discussion regarding claims 4 and 10).

Applicant respectfully disagrees. Suver col. 13, lns. 63-67 and col. 14, lns. 1-6 refers only a query syntax for "linking" related tables. In the Suver schema, complex data that is logically multi-valued or hierarchical is stored as embedded data in a complex column comprised of embedded data subtables. These tables and subtables of Suver are thus "linked" or "related" to each other. However, this has nothing to do with "obtaining at least one key field for each of the populated tables in the source database and linking each populated table to at least one of a plurality of send programs based on the at least one key field" as recited in claims 30 and 38. Martin col. 19, lns 38-43 merely describe reading and sending data out to an enterprise. This

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cannot be properly compared to linking each populated table to at least one of a plurality of send programs based on the at least one key field, as is recited in claims 30 and 38.

With respect to new independent claim 40, the applied references lack any teaching that would have suggested a system comprising a source database associated with a source computer having a plurality of source tables, wherein each source table has at least one of a plurality of key fields, a target database associated with a target computer having a plurality of target tables corresponding to the plurality of source tables and a user interface for accepting user selected criteria, wherein the source computer and the target computer refresh the target database with data from the source database based on the user selected criteria and a corresponding one of the plurality of key fields.

In the Office Action, however, the Examiner seems to assert that it would have been obvious to a person with ordinary skill in the art at the time of the invention to "apply Martin's data movement method" into "Suver's teaching of relational database management system to utilize the data movement of EDM method to create and store a change record including capturing the changed data" (see the Office Action at page 5, discussion regarding claim 1).

Applicant respectfully disagrees with the Examiner's analysis. Applicant respectfully submits that the Examiner has misunderstood the scope and content of the Martin and Suver references. First, as discussed above, Martin is concerned with ensuring that changes made to data in the source database are consistently applied across multiple databases. As such, the only data moved by Martin is "changed data." Martin's EDM method captures changes made to a source database and propagates them throughout a distributed enterprise computing system, by, in part, comparing edition levels of the source and the target. Thus, Martin does not teach or suggest a system such as Applicant's wherein the source computer and the target computer refresh the target database with data from the source database based on the user selected criteria and a corresponding one of the plurality of key fields as is recited in new independent claim 40. Further, the bald fact that Suver deals with a relational database system or mentions the term "key" in no way teaches or suggests Applicant's claimed system wherein the source computer and the target computer refresh the target database with data from the source database based on the user selected criteria and a corresponding one of the plurality of key fields.

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To establish a prima facie case of obvious, three basic criteria must be met.<sup>1</sup> First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on Applicant's disclosure.

Applicant respectfully submits that the Examiner has failed to meet at least the first and the third basic criteria required to establish a prima facie case of obviousness. Namely, the cited references Martin, Suver and Ashutosh include no suggestion or motivation to modify the references or combine the reference teachings in the manner suggested by the Examiner. Second, the cited references Martin, Suver and Ashutosh, either alone or in combination, do not teach or suggest all of the limitations recited in Applicant's claims. For at least these reasons, new claims 25-43 are patentable over the references cited.

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<sup>1</sup> MPEP 706.02(j).

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**CONCLUSION**

All claims in this application are in condition for allowance. Applicant respectfully requests reconsideration and prompt allowance of all pending claims. Please charge any additional fees or credit any overpayment to deposit account number 50-1778. The Examiner is invited to telephone the below-signed attorney to discuss this application.

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